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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/540,190	03/31/2000	Robert W. Faber	42390.P7948	3535

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EXAMINER

SONG, HOSUK

ART UNIT	PAPER NUMBER
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2135

DATE MAILED: 03/09/2004

12

Please find below and/or attached an Office communication concerning this application or proceeding.

DM

Office Action Summary

Application No.

09/540,190

Applicant(s)

FABER ET AL.

Examiner

Hosuk Song

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 15, 18, 21-27, 33-36, 38, 39, 41, 42, 44, 45, 47 and 48 is/are rejected.
- 7) ☒ Claim(s) 5-14, 19, 20, 28-32, 37, 40, 43, 46 and 49 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 3/31/2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-5, 7-11.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4,15-18,21-27,33-36,38-39,41-42,44-45,47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen et al.(US 4,613,901) in view of Tatebayashi(US 6,654,883).

Claims 1,15,21,33,38,41,44,47: Gilhousen's patent discloses a video source application requesting from a video hardware interface status with respect to a link linking video source device to an external video sink device and supplementing status request with a first basis value to a symmetric ciphering/deciphering process in (fig.1 and 5). Gilhousen discloses video source application receiving from video hardware interface requested status and a verification key, generated through symmetric ciphering/deciphering process employing first basis value in (fig.5 and col.3,lines 34-54). Gilhousen does not specifically disclose video source application verifying the correctness of verification key to determine whether to trust provided status.

Tatebayashi's patent discloses device authentication method where it verifies the verification key to determine whether to trust provided status in (fig.3). Note that onboard device sends encrypted data only after it verifies data from roadside device. It would have been obvious to person of ordinary skill in the art at the time invention was made to employ source data verifying verification key from second device as taught in Tatebayashi with video source device disclosed in Gilhousen in order to make sure that

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data recipient is an intended authorized receiver and trust can be established between two entities before transmission of any sensitive data in order to maintain and secure sensitive information against data hijackers.

Claims 2-3: Gilhousen discloses video source application supplementing status request with a selection key for the video hardware interface to use to generate an authentication key for use to generate a verification key in (col.3,lines 34-49).

Claim 4: Gilhousen discloses video source application independently generating its own copy of an authentication key by summing a plurality of cryptographic keys over a selection key received from video hardware interface in (col.2,lines 3-19).

Claims 16-17: Gilhousen discloses video application supplementing secret request with a selection key for the video hardware interface to use to generate an authentication key for use by symmetric ciphering/deciphering process in (col.5,lines 45-64).

Claim 18: Gilhousen discloses video source application independently generating its own copy of an authentication key by summing a plurality of cryptographic keys over a selection key received from video hardware interface in (col.2,lines 3-19).

Claims 22-27,34-36: Gilhousen discloses video source application supplementing status request with a selection key for the video hardware interface to use to generate an authentication key for use to generate a verification key in (col.3,lines 34-49).

Gilhousen discloses video source application independently generating its own copy of an authentication key by summing a plurality of cryptographic keys over a selection key received from video hardware interface in (col.2,lines 3-19).

Claims 39,42,45,48: Gilhousen discloses video source application supplementing status request with a selection key for the video hardware interface to use to generate an authentication key for use to generate a verification key in (col.3,lines 34-49).

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Gilhousen discloses video source application independently generating its own copy of an authentication key by summing a plurality of cryptographic keys over a selection key received from video hardware interface in (col.2,lines 3-19).

Allowable Subject Matter

2. Claims 5-14,19-20,28-32,37,40,43,46,49 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 5,19,40,43,46,49: Prior art of record does not teach independent generation of video source applicant's own copy of ciphering key comprises video source application applying a one way hash to at least a first selected subset of basis value provided to video hardware interface using an independently generated copy of an authentication key.

Claims 6-8,20 are allowed because of dependency.

Claims 9,28: Prior art of record does not teach video source application requesting from the video hardware interface a secret employed by the video hardware interface to cipher video to be transmitted by the video hardware interface to the external video sink device and supplementing secret request with a second basis value to symmetric ciphering/deciphering process;video source application receiving the video hardware interface requested secret in a ciphered form,having been ciphered with a ciphering key generated using symmetric ciphering/deciphering process and employing second basis value.

Claims 10-14,29-32 are allowed because of dependency.

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Claim 37: Prior art pf record does not teach video hardware interface applying one way hash function to at least a second selected subset of basis value using the result of first application of the one-way hash function.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

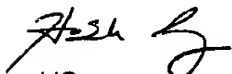
a. Bruce Schneier(Applied Cryptography) discloses symmetric key generation method.

b. Gammie(US 5,029,207) discloses video scrambling method.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hosuk Song whose telephone number is 703-305-0042. The examiner can normally be reached on Tue-Fri from 6:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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